



Continuing Our Energy Leadership

By U.S. Sen. John Cornyn

For more than 100 years, starting with the legendary Spindletop oil field near Beaumont, Texas has been a leading energy producer in the U.S. and the world. Now, a page is turning – and Texas is again in the forefront of global energy developments.

Two Texas cities – Odessa and Jewett – are among the 12 national finalists to host the design, construction and operation of “FutureGen,” the world’s first near-zero-emissions coal-powered generation plant.

FutureGen is a demonstration project launched by President Bush in 2003 to test new technology in refining coal and generating electricity. If successful, FutureGen technologies could help lower energy costs, increase domestic energy resources and eliminate sources of harmful air pollutants.

Last month, the U.S. Department of Energy selected Odessa and Jewett to compete with cities from our nation’s leading coal-producing states, including West Virginia, Illinois and Wyoming. The winning site will be announced next summer.

FutureGen may sound complex, but its concept is fairly simple. It uses a chemical process to release the energy from coal – known as gasification – rather than burning the coal to achieve the same result.

More specifically, coal gasification is an innovative way to chemically break down coal using heat and pressure. The chemical reactions produce clean-burning gases that are used to generate electricity as well as other valuable by-products that can be sold for industrial use.

The FutureGen plant will also use technology to capture and safely store harmful carbon dioxide emissions before their release into the atmosphere. The carbon dioxide can be piped to oil fields, where it can then be used to help extract valuable fossil fuels.

FutureGen, and projects like it, represent a scientific attempt to meet our energy needs. By contrast, Texas’ previous success in energy often relied on big dreams and a large dollop of good fortune.

The Tyler Morning Telegraph newspaper described how one major East Texas oil field was discovered:

“Columbus Marion ‘Dad’ Joiner, a man in his 60s, was broke and depressed when he went to sleep along a seawall in Galveston one night in 1926 and had a vision that he would find the biggest oil field in the world in East Texas.

“When he awoke, he sketched the topography of the place he saw in his dream. He later walked and hitchhiked his way to Rusk County and believed he had found that visionary place on Daisy Bradford’s land.

“She leased him the land and he drilled three wells and the third one finally came in – and it was the biggest oil field in the world.” The field ultimately supplied vast amounts of energy to the Allies in World War II.

Another great believer, Rupert Ricker, a lawyer in Big Lake, picked a spot to drill in Reagan County

where local folks just knew that no oil existed. Well, it did after all.

Santa Rita Number 1 came in on May 28, 1923, giving birth to another Texas behemoth, the Big Lake oilfield, and launching production in the legendary Permian Basin. The state has benefited greatly. Over the years, Santa Rita Number 1 has provided about \$1 billion to the state’s Permanent University Fund.

Now a new generation of visionaries, which includes local and state leaders and scientists at the University of Texas at Austin, are turning their eyes toward another abundant Texas resource: our coal. Either Odessa or Jewett is a perfect fit for FutureGen. The Odessa site boasts a strong West Texas expertise in the storage and transportation of carbon dioxide and its use in enhanced oil recovery. The Jewett site, in east-central Texas, offers an abundant supply of coal.

Many people would be surprised to learn that Texas is the nation’s fifth-largest producer of coal, the top consumer of coal in the U.S. and has a 200-year reserve of lignite coal. A carbon dioxide storage facility in Texas would help unearth more of our oil and gas reserves, which in turn could boost much-needed domestic production.

Texas is no stranger to alternative fuel technology. Earlier this month, Abilene hosted the nation’s largest-ever conference on wind power. With our turbine fields in West Texas, our state runs a close second only to California in generating wind-produced megawatts of electricity.

We’re also poised to tap solar power as a serious source of energy. With our vast acreage and sunny climate, Texas solar-resource potential ranks first in the nation. The energy from sunshine falling on a single acre of land in West Texas is capable of producing the energy equivalent of 800 barrels of oil each year.

Texas has long provided America with valuable energy resources. Even as oil and gas reserves in major Texas fields have gradually declined over the years, Texas remains the headquarters of the world’s energy industry. It would be entirely fitting if the technology that fuels future generations of our global energy supply is developed in Texas as well – in Jewett, Odessa or elsewhere.

Sen. Cornyn is a member of the following Senate Committees: Armed Services, Judiciary, Budget, Small Business and Entrepreneurship, and Joint Economic. He is the chairman of the subcommittees on Immigration, Border Security and Citizenship and Emerging Threats and Capabilities. Cornyn served previously as Texas Attorney General, Texas Supreme Court Justice and Bexar County District Judge.

For Sen. Cornyn’s previous Texas Times columns: www.cornyn.senate.gov/column